

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2005/001897

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N5/06 C12N15/01 A01K67/027

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N A01K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	<p>SALE J E ET AL: "TDT-ACCESSIBLE BREAKS ARE SCATTERED OVER THE IMMUNOGLOBULIN V DOMAIN IN A CONSTITUTIVELY HYPERMUTATING B CELL LINE"</p> <p>IMMUNITY, CELL PRESS, US, vol. 9, no. 6, 1998, pages 859-869, XP000876807</p> <p>ISSN: 1074-7613</p> <p>page 860, last paragraph - page 862, paragraph 2</p> <p>page 862, last paragraph - page 863, paragraph 4; figure 4</p> <p>page 866, paragraph 3</p> <p>-----</p> <p>-/--</p>	1-5, 9-27

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex

### \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

1 August 2005

Date of mailing of the international search report

17/08/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	WO 00/22111 A (MEDICAL RES COUNCIL ;CUMBERS SARAH JANE (GB); NEUBERGER MICHAEL SA) 20 April 2000 (2000-04-20) cited in the application claims 1-10 page 4, line 1 - page 9, line 15; claims 11-43 page 26 - page 36; examples 4-6	1-5, 9-27, 36, 37, 42
A	DIAZ M ET AL: "EVOLUTION OF SOMATIC HYPERMUTATION AND GENE CONVERSION IN ADAPTIVE IMMUNITY" IMMUNOLOGICAL REVIEWS, MUNKSGAARD, XX, vol. 162, April 1998 (1998-04), pages 13-24, XP000940962 ISSN: 0105-2896 page 16, paragraph 3 - paragraph 6 page 17, paragraph 4	1-42
A	WO 02/100998 A (MEDICAL RES COUNCIL ;CUMBERS SARAH JANE (GB); NEUBERGER MICHAEL SA) 19 December 2002 (2002-12-19) cited in the application page 41 - page 53; examples 8,9 page 3, line 25 - line 14; claims 1-33	1-42
A	YELAMOS J ET AL: "Targeting of non-Ig sequences in place of the V segment by somatic hypermutation" NATURE, MACMILLAN JOURNALS LTD. LONDON, GB, vol. 376, no. 6537, 1995, pages 225-229, XP002211125 ISSN: 0028-0836 the whole document	1-42
T	ARAKAWA HIROSHI ET AL: "Immunoglobulin gene conversion: Insights from bursal B cells and the DT40 cell line." DEVELOPMENTAL DYNAMICS, vol. 229, no. 3, March 2004 (2004-03), pages 458-464, XP009029478 ISSN: 1058-8388 (ISSN print) the whole document	1-42

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2005/001897

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0022111	A	20-04-2000	AU 776049 B2	26-08-2004
			AU 6114299 A	01-05-2000
			CA 2346927 A1	20-04-2000
			EP 1117774 A1	25-07-2001
			WO 0022111 A1	20-04-2000
			JP 2002527060 T	27-08-2002
			US 2003108889 A1	12-06-2003
			US 2003087236 A1	08-05-2003
			US 2002155453 A1	24-10-2002
WO 02100998	A	19-12-2002	US 2002155453 A1	24-10-2002
			US 2003108889 A1	12-06-2003
			CA 2449264 A1	19-12-2002
			EP 1399016 A2	24-03-2004
			WO 02100998 A2	19-12-2002
			JP 2005507241 T	17-03-2005
			US 2005026246 A1	03-02-2005